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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Christian Coste

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DENNISON, SCHULTZ & MACDONALD
1727 KING STREET
SUITE 105
ALEXANDRIA, VA 22314

EXAMINER

JANCA, ANDREW JOSEPH

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,871	Applicant(s) COSTE ET AL.	
	Examiner Andrew Janca	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) 32-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 19-36 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 19-31 in the reply filed on 3/20/09 is acknowledged. The traversal (Remarks page 6) is on the ground(s) that the special technical feature of the amended method (19-31) and apparatus (32ff) claims is a kneading device with a fraser, and an inlet for water containing dissolved ozone. This is not found persuasive because claim 19 does not recite an inlet for water. If it is considered common sense that the recitation of water being added to the kneading machine in claim 19 implies some sort of inlet, then such an inlet is necessarily also implied by the reference GB 2,264,623 A to Collins which also recites the addition of water to its mixing device (page 9, Table, 'Recipe'). If what is meant is that the additional feature shared by the amended apparatus and method claims is the introduction of water containing ozone, the contents of the fluid inlet recited by claim 32 (line 5) are a statement of intended use, which does not recite an actual structure that could patentably distinguish it over the cited reference. It has been held that "[e]xpressions relating the apparatus contents thereof during an intended use operation are of no significance in determining the patentability of the apparatus claim." See *Ex parte Thilbault*, 164 USPQ 666, 667 (Bd. App. 1969). Hence the technical features which amended claims 19 and 32 have in common are still limited to a kneading device with a fraser, taught by Collins. The requirement is still deemed proper and is therefore made FINAL.

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2. Claims 32-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3/20/09.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 19-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,264,623 A to Collins in view of US 2004/0022917 A1 by Noll and US 2003/0037684 A1 by Yvin et al.

8. With regard to claim 19, Collins teaches a method for kneading dough containing flour, which is synonymous with soft wheat flour (as contrasted to meal which is made from hard grains) according to the instant specification (1:22-29), comprising kneading the dough in the presence of wetting water (p 7 para 2, p 9 Table) for at least two minutes (claims 2-4) in a kneading machine 1 using at least one mechanical agitator 2 (figure 1), in the presence of an oxygenating compound (p 6 para 4, "This invention can also..."); said kneading taking place under a gaseous phase in the kneading machine of pressure between 1.1-1.6 absolute bars (p 9, Table, 'First stage of mixing').

a. Collins does not teach that the oxygenating compound include ozone, or that the ozone may be added partly dissolved in the wetting water. However, Noll teaches a method of mixing flour and water to make bread dough with oxygenating agents which may include ozone (para 0014, claim 18), using a mechanical agitator (para 0028); where further the wetting water may be impregnated with added oxygen to promote oxidation (para 0014). Collins and

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Noll are analogous art, being from the same field of endeavor, breadmaking. It would have been obvious to one of ordinary skill in the art to choose the oxygenating compound of Collins to be ozone, as does Noll: the motivation would have been to choose an oxidating agent of known suitability (Noll para 0014). It would further have been obvious to one of ordinary skill in the art to try supplying the ozone directly in the water, in view of the suggestion by Noll that the wetting water may itself containing oxidizing agents (para 0014).

b. Collins and Noll do not teach the ratio by which ozone may be added to the bread dough. However, Yvin et al teach a method of ozonating grain flour where the ozone is supplied by direct gas (paras 0030-0031) or dissolved in wetting water (paras 0055-0057) in the range of 0.5-20 g per kg of grains (para 0021), which given that the flour from the grains comprise about 60% of the final weight of the dough (Collins p 9, Table) will result in a range of 0.3-12 g of ozone per kg of dough. It would have been obvious to one of ordinary skill in the art to look to Yvin et al for teachings on the ozonation of bread products, being from the same field of endeavor as Collins and Noll, the treatment of industrial bread production lines with gaseous additives; and further from the same problem-solving area as Noll, means of adding ozone to mixing processes. Yvin et al further teach the amount of ozone supplied by weight proportion to the final product as a variable desirable of optimization (paras 0021, 0168-0172). It would have been obvious to one of ordinary skill in the art to have optimized this result-effective variable.

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9. With regard to claims 20 and 21, Yvin et al teach that the wetting water containing dissolved ozone may be prepared from a vector gas containing ozone, which may be air, oxygen, or a mixture thereof (paras 0055-0058).

10. With regard to claim 22, Yvin et al teach that the wetting water is ozonated or hyper-ozonated (para 68), and is prepared using a bubbling-type dissolution reactor equipped with a porous device (paras 0068-0070), using pressure dissolution devices of single or multi-stage hydro-ejector type 12-16 (para 0070, figure 2).

11. With regard to claims 23 and 24, Noll teaches that the wetting water may be injected at pressures of 30-100 bar (para 0009); and further teaches the water pressure as a variable desirable of optimization (paras 0009, 0017). It would have been obvious to one of ordinary skill in the art to have optimized this result-effective variable.

12. The additional elements of claims 25-27, including supplying the oxygen-containing gas to a gaseous headspace in the kneading machine, are taught by Collins (p 5 paras 1-2, p 7 paras 1-2, figure 1); and that the oxygenating gas may include ozone supplied with a vector gas that may include air, oxygen, or a mixture thereof, by Yvin et al (paras 0055-0058).

13. The additional element of claim 28, including that the pressure in the gaseous phase is between 1.3-1.5 absolute bars, is taught by Collins (p 9 Table, 'First stage of mixing').

14. The additional elements of claim 29, including that the ozone is added selectively, sequentially, or continuously, are taught by Noll (para 14, claims 17-18:

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adding the ozone at a particular step of a mixing process requires selection); and Yvin et al (paras 0054ff).

15. The additional elements of claim 30, that the kneading may be conventional (p 8 para 3) or intensive (p 9, Table, 'Dough processing') are taught by Collins.

16. The additional element of claim 31, that the kneading is performed solely by the at least one mechanical agitator and not by any agitation of water under high pressure, is taught by Collins (p 7 para 2).

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Janca whose telephone number is (571) 270-5550. The examiner can normally be reached on M-Th 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJJ

/DAVID L. SORKIN/
Primary Examiner, Art Unit 1797